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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,204	01/31/2006	Kent Nyman	10400-000153/US	6990

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RESTON, VA 20195

EXAMINER

BASHAW, HEIDI M

ART UNIT	PAPER NUMBER
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4138

MAIL DATE	DELIVERY MODE
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11/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,204

Applicant(s)

NYMAN, KENT

CT

Examiner

Heidi M. Bashaw

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/14/2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Invo EP 0 314 657 in view of Keogh, Jr. et al. 2,228,169 (Keogh).

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4. Re claim 1, Invo teaches a mirror 4 and a suction device (col. 4, ll. 19-20) having an inlet through which liquid is sucked by the suction device and the reflecting surfaces of the mirror being adapted to be at least partially cleaned by liquid flowing thereacross (col. 4, ll. 30-35).

5. Invo does not teach the reflecting surface of the mirror being passed through by an opening.

6. Keogh teaches the reflecting surface of the mirror being passed through by an opening as illustrated in fig. 3 (col. 2, ll. 6-8).

7. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh in order to provide more freedom of movement and not create a blind spot as taught by Keogh (col. 1, ll. 32-34).

8. Re claims 2 and 14, Invo does not teach the mirror is prevented from rotating during use.

9. Keogh teaches the mirror is prevented from rotating during use (col. 2, ll. 40-41).

10. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh in order allow the user to direct the suction in a desired direction with one hand leaving the other hand free as taught by Keogh (col. 3, ll. 61-62, 70-71, col. 4, ll. 1-3).

11. Re claim 3, Invo teaches the mirror is arranged to suck up all liquid intended to be removed (col. 4, ll. 31-35).

12. Re claim 4, Invo does not teach the mirror extends in the manner of a flange away from the inlet.

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13. Keogh teaches the mirror extends in the manner of a flange away from the inlet as illustrated in fig. 3.

14. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh in order to provide more freedom of movement and not create a blind spot as taught by Keogh (col. 1, ll. 32-34).

15. Re claims 5 and 16-17, Invo does not teach the mirror forms an integrated part of the instrument, however, it has been held that the use of a one piece construction instead of the structure disclosed in the prior art would be merely a matter of obvious engineering choice (*In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) MPEP 2144.04 V. B.).

16. Re claims 6 and 18, Invo teaches the mirror removably attachable to the instrument as illustrated in fig. 4 (col. 3, ll. 48-49).

17. Re claim 8, Invo teaches the suction device comprises a tubular suction nozzle (col. 4, ll. 19-20, 51-53).

18. Invo does not teach the opening in the mirror forming a mouth and the suction nozzle is curved.

19. Keogh teaches the opening in the mirror forming a mouth and the nozzle is curved as illustrated in fig. 3.

20. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh in order to provide more freedom of movement and not create a blind spot as taught by Keogh (col. 1, ll. 32-34).

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21. Re claims 9 and 19, Invo teaches the mirror is removably attached to the suction device by a frictional coupling arrangement (col. 3, ll. 48-49).

22. Re claims 10 and 20, Invo teaches the mirror is removably attached to a seat in the suction device by a holder as illustrated in fig. 5.

23. Re claim 11, Invo teaches a mirror 4 comprising a sleeve 6 adapted to couple the mirror to a suction device and a reflecting surface being adapted to at least be partially cleaned by liquid sucked by the suction device (col. 4, ll. 30-35).

24. Invo does not teach a reflecting surface being passed through by an opening.

25. Keogh teaches a reflecting surface being passed through by an opening as illustrated in fig. 3 (col. 2, ll. 6-8).

26. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh in order to provide more freedom of movement and not create a blind spot as taught by Keogh (col. 1, ll. 32-34).

27. Re claim 12, Invo teaches the suction device includes an inlet and is for a dental instrument (col. 4, ll. 19-20, 51-54).

28. Invo does not teach the opening forms the mouth of the inlet.

29. Keogh teaches the opening forms the mouth of the inlet as illustrated in fig. 3.

30. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh in order to provide more freedom of movement and not create a blind spot as taught by Keogh (col. 1, ll. 32-34).

31. Re claim 13, Invo teaches a dental instrument comprising the suction device including an inlet (col. 4, ll. 19-20, 51-54).

32. Invo does not teach the opening forms the mouth of the inlet.
33. Keogh teaches the opening forms the mouth of the inlet as illustrated in fig. 3.
34. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh in order to provide more freedom of movement and not create a blind spot as taught by Keogh (col. 1, ll. 32-34).
35. Re claim 15, Invo teaches the mirror is arranged to suck up, through the sleeve all liquid intended to be removed (col. 51-54).
36. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Invo EP 0 314 657 in view of Keogh, Jr. et al. 2,228,169 (Keogh) further in view of Hukuba 4,212,105.
37. Re claim 7, Invo in view of Keogh does not teach the mirror is of a magnifying kind.
38. Hukuba teaches the mirror is of a magnifying kind (col. 9, l. 41).
39. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Invo in view of Keogh further in view of Hukuba in order to allow of inspection of the minutest details as taught by Hukuba (col. 9, ll. 42-43).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heidi M. Bashaw whose telephone number is 571-270-3081. The examiner can normally be reached on Mon-Fri (Alternate Fridays off) 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ehud Gartenberg
HMB
11/01/2007

Kimberly S. Smith
KIMBERLY S. SMITH
PRIMARY EXAMINER
11/1/07